

CLAIMS

What is claimed is:

- 5 1. A method for enabling a three-dimensional simulation through a region,
comprising:
- obtaining information about a path traversed by a user through a region,
including a plurality of locations on said path;
 - acquiring content associated with at least some of said locations;
 - 10 • correlating said locations with said content; and
 - enabling an interactive three-dimensional simulation through said region as
experienced from a moving vantage point along a simulation route, including:
 - accessing a three-dimensional map for at least a portion of said region; and
 - associating said acquired content to locations on said three-dimensional
 - 15 map based on said correlation.
2. The method of claim 1 where said simulation route is different than said
traversed path.
- 20 3. The method of claim 1 where said simulation route is at least partially user-
specifiable.
4. The method of claim 1 where said simulation route is at least partially
automatically generated.
- 25 5. The method of claim 1 where:
- (i) at least some of said locations are known as a function of time;
 - (ii) at least some of said content is identifiable by its time of acquisition; and
 - (iii) said associating includes using said times in (i) and (ii) to determine locations
 - 30 on said map where said content should be associated.

6. The method of claim 1 where said content represents synthetic content.
7. The method of claim 1 further comprising organizing said content in an electronic file by classifications thereof.
- 5
8. The method of claim 1 where said obtaining information about said path includes capturing orientation information along said traversed path.
9. A method for simulating a trip through a region, from a three-dimensional vantage point, comprising:
- 10
- accessing information about a path traversed through a region, including a plurality of predetermined locations;
 - accessing content associated with at least some of said locations;
 - accessing a three-dimensional map of said region;
 - 15 • associating at least some of said content, and at least some of said locations, with said map;
 - determining a simulation route through said region; and
 - displaying to a user an interactive simulation along said simulation route, including presenting content along said simulation route, as experienced from
 - 20 a moving vantage point.
10. The method of claim 9 further comprising presenting at least some of said content at least partially off of said path.
- 25 11. The method of claim 10 further comprising displaying at least some of said content as a rotating image.
12. The method of claim 10 further comprising suspending presentation of said off-path content based on its proximity and field-of-view relative to said user.
- 30 13. The method of claim 9 where:

- (i) said simulation route substantially tracks said traversed path; and
- (ii) said moving vantage point follows said traversed path.

14. The method of claim 9 including modifying at least a portion of said
5 simulation route to avoid collision with at least some of said content during said simulation.

15. The method of claim 9 including specifying at least a portion of said
simulation route in accordance with local terrain features.
10

16. The method of claim 9 further comprising presenting more detailed
information about at least one item of content selected by said user.

17. The method of claim 9 further comprising defining said moving vantage point
15 by said user's selection of at least one item of content.

18. The method of claim 9 further comprising pausing, while presenting at least
some of said content, to improve user access thereto.

20 19. The method of claim 9 further comprising executing at least one automated
process for performing a user-specified interactive simulation aspect that would
otherwise be inconvenient for the user to implement manually.

20. The method of claim 19 further comprising accepting a user command to
25 override a portion of the automated process.

21. The method of claim 19 where said automated process includes automatically
generating a simulation route related to, but not identical to, said traversed path.

30 22. The method of claim 9 where obtaining said simulation route includes:
(i) accepting a user-specified sequence of locations to be visited; and

(ii) calculating said simulation route by curve-fitting said specified sequence of locations.

23. The method of claim 9 further comprising accessing information about multiple paths for use in said simulation.

24. The method of claim 9 further comprising displaying simulation information to multiple users.

25. The method of claim 22 further comprising facilitating said multiple users to interact with each other during said simulation.

26. A computer-readable medium, for enabling a three-dimensional simulation through a region, comprising logic instructions that when executed:

- obtain information about a path traversed by a user through a region, including a plurality of locations on said path;
- acquire content associated with at least some of said locations;
- correlate said locations with said content; and
- enable an interactive three-dimensional simulation of travel through said region as experienced from a moving vantage point along a simulation route, including:
 - access a three-dimensional map for at least a portion of said region; and
 - associate said acquired content to locations on said three-dimensional map based on said correlation.

27. The computer-readable medium of claim 26 where said simulation route is different than said traversed path.

28. The computer-readable medium of claim 26 where said simulation route is at least partially user-specified.

29. The computer-readable medium of claim 26 where said simulation route is at least partially automatically generated.

5 30. The computer-readable medium of claim 26 where said content represents synthetic content.

31. A computer-readable medium for simulating a trip through a region, from a three-dimensional vantage point, comprising logic instructions that when executed:

- 10 • access information about a path traversed through a region, including a plurality of predetermined locations;
- access content associated with at least some of said locations;
- access a three-dimensional map of said region;
- associate at least some of said content, and at least some of said locations, on said map;
- 15 • determine a simulation route through said region; and
- display to a user an interactive simulation along said simulation route, including presenting content along said simulation route, as experienced from a moving vantage point.

20 32. The computer-readable medium of claim 31 including modifying at least a portion of said simulation route to avoid collision with at least some of said content during said simulation.

25 33. The computer-readable medium of claim 31 further comprising executing at least one automated process, for performing a user-specified interactive simulation aspect that would otherwise be inconvenient for the user to implement manually.

34. The computer-readable medium of claim 31 further comprising facilitating multiple users' interaction with each other during said simulation.

30

35. Apparatus for enabling a three-dimensional simulation through a region, comprising:
- means for obtaining information about a path traversed by a user through a region, including a plurality of locations on said path;
 - 5 • means for acquiring content associated with at least some of said locations;
 - means for correlating said locations with said content; and
 - means for enabling an interactive three-dimensional simulation through said region as experienced from a moving vantage point along a simulation route, including:
 - 10 • means for accessing a three-dimensional map for at least a portion of said region; and
 - means for associating said acquired content to locations on said three-dimensional map based on said correlation.
- 15 36. Apparatus for simulating a trip through a region, from a three-dimensional vantage point, comprising:
- means for accessing information about a path traversed through a region, including a plurality of predetermined locations;
 - means for accessing content associated with at least some of said locations;
 - 20 • means for accessing a three-dimensional map of said region;
 - means for associating at least some of said content, and at least some of said locations, with said map;
 - means for determining a simulation route through said region; and
 - means for displaying to a user an interactive simulation along said simulation route, including presenting content along said simulation route, as experienced
 - 25 from a moving vantage point.